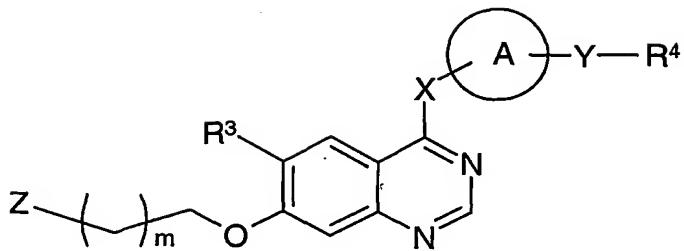


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CLAIMS

1. A compound of formula (I):



5 formula (I)

wherein A is 6-membered heteroaryl containing a nitrogen atom and optionally containing one or two further nitrogen atoms;

X is O, S, S(O), S(O)<sub>2</sub> or NR<sup>14</sup>;

10 m is 0, 1, 2, 3 or 4;

Y is a group selected from O, NR<sup>5</sup>CO, CONR<sup>5</sup>, CR<sup>6</sup>R<sup>7</sup>CONR<sup>5</sup> and CR<sup>6</sup>R<sup>7</sup>NR<sup>5</sup>;

15 Z is a group selected from -NR<sup>1</sup>R<sup>2</sup>, phosphonoxy, C<sub>3-6</sub>cycloalkyl which C<sub>3-6</sub>cycloalkyl is substituted by phosphonoxy or C<sub>1-4</sub>alkyl substituted by phosphonoxy, and a 4- to 7-membered ring linked via a carbon atom containing a nitrogen atom and optionally containing a further nitrogen atom, which ring may be saturated, unsaturated or partially saturated which ring is substituted on carbon or nitrogen by phosphonoxy or C<sub>1-4</sub>alkyl (substituted by phosphonoxy) and which ring is optionally further substituted on carbon or nitrogen by 1, 2 or 3 halo or C<sub>1-4</sub>alkyl groups;

20 R<sup>1</sup> is a group selected from -COR<sup>8</sup>, -CONR<sup>8</sup>R<sup>9</sup> and C<sub>1-6</sub>alkyl which C<sub>1-6</sub>alkyl is substituted by phosphonoxy and optionally further substituted by 1 or 2 halo or methoxy groups;

25 R<sup>2</sup> is a group selected from hydrogen, -COR<sup>10</sup>, -CONR<sup>10</sup>R<sup>11</sup> and C<sub>1-6</sub>alkyl which C<sub>1-6</sub>alkyl is optionally substituted by 1, 2 or 3 halo or C<sub>1-4</sub>alkoxy groups, -S(O)<sub>p</sub>R<sup>11</sup> (where p is 0, 1 or 2) or phosphonoxy, or R<sup>2</sup> is a group selected from C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>3-6</sub>cycloalkyl and C<sub>3-6</sub>cycloalkylC<sub>1-4</sub>alkyl;

or R<sup>1</sup> and R<sup>2</sup> together with the nitrogen to which they are attached form a 4- to 7-membered ring optionally containing a further nitrogen atom which ring may be saturated, unsaturated or partially saturated which ring is substituted on carbon or nitrogen by a group selected from phosphonoxy and C<sub>1-4</sub>alkyl substituted by phosphonoxy or -NR<sup>8</sup>R<sup>9</sup>, and which ring is optionally further substituted on carbon or nitrogen by 1, 2 or 3 halo or C<sub>1-4</sub>alkyl groups;

**R**<sup>3</sup> is a group selected from hydrogen, halo, cyano, nitro, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkyl, -OR<sup>12</sup>, -CHR<sup>12</sup>R<sup>13</sup>, -OC(O)R<sup>12</sup>, -C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -C(O)NR<sup>12</sup>R<sup>13</sup>, -NR<sup>12</sup>SO<sub>2</sub>R<sup>13</sup> and -NR<sup>12</sup>R<sup>13</sup>;

**R**<sup>4</sup> is hydrogen or a group selected from C<sub>1-4</sub>alkyl, heteroaryl, heteroarylC<sub>1-4</sub>alkyl, aryl and 5 arylC<sub>1-4</sub>alkyl which group is optionally substituted by 1, 2 or 3 substituents selected from halo, methyl, ethyl, cyclopropyl and ethynyl;

**R**<sup>5</sup> is a group selected from hydrogen, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, C<sub>3-6</sub>cycloalkyl and C<sub>3-6</sub>cycloalkylC<sub>1-4</sub>alkyl;

**R**<sup>6</sup> and **R**<sup>7</sup> are independently selected from hydrogen, halo, C<sub>1-4</sub>alkyl, C<sub>3-6</sub>cycloalkyl, hydroxy 10 and C<sub>1-4</sub>alkoxy;

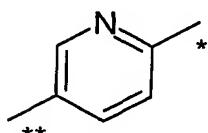
**R**<sup>8</sup> is C<sub>1-4</sub>alkyl substituted by phosphonoxy and optionally further substituted by 1 or 2 halo or methoxy groups;

**R**<sup>9</sup> is selected from hydrogen and C<sub>1-4</sub>alkyl;

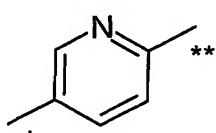
**R**<sup>10</sup> is selected from hydrogen and C<sub>1-4</sub>alkyl which C<sub>1-4</sub>alkyl is optionally substituted by halo, 15 C<sub>1-4</sub>alkoxy, S(O)<sub>q</sub> (where q is 0, 1 or 2) or phosphonoxy;

**R**<sup>11</sup>, **R**<sup>12</sup>, **R**<sup>13</sup> and **R**<sup>14</sup> are independently selected from hydrogen, C<sub>1-4</sub>alkyl and heterocyclyl; or a pharmaceutically acceptable salt thereof.

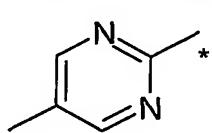
2. A compound according to claim 1 wherein A is a group of formula (a), (b), (c) or (d):



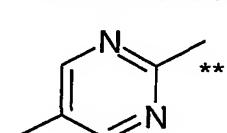
20 (a)



(b)



(c)



(d)

where \* is the point of attachment to the X group of formula (I) and \*\* is the point of attachment to the Y group of formula (I); or a pharmaceutically acceptable salt thereof.

3. A compound according to claim 2 wherein A is a group of formula (b) or (d) as 25 defined in claim 2; or a pharmaceutically acceptable salt thereof.

4. A compounds according to any one of claims 1, 2 or 3 wherein X is NH; or a pharmaceutically acceptable salt thereof.

30 5. A compound according to any one of the preceding claims wherein Z is a group selected from -NR<sup>1</sup>R<sup>2</sup>, phosphonoxy, cyclopropyl which cyclopropyl is substituted by C<sub>1</sub>.

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$_{\text{4}}$ alkyl substituted by phosphonooxy, and a piperidine or piperazine ring linked via carbon which ring is substituted on carbon or nitrogen by phosphonooxy or  $\text{C}_{1\text{-}4}$ alkyl substituted by phosphonooxy; or a pharmaceutically acceptable salt thereof.

5 6. A compound according to any one of the preceding claims wherein  $\text{R}^1$  is  $\text{C}_{1\text{-}5}$ alkyl substituted by phosphonooxy and  $\text{R}^2$  is hydrogen,  $\text{C}_{1\text{-}5}$ alkyl,  $\text{C}_{2\text{-}4}$ alkynyl or  $\text{C}_{3\text{-}6}$ cycloalkyl; or a pharmaceutically acceptable salt thereof.

7. A compound according to any one of claims 1 to 5 wherein  $\text{R}^1$  and  $\text{R}^2$  together with  
10 the nitrogen to which they are attached form a piperidine, pyrrolidine or piperazine ring which is substituted on carbon or nitrogen by a group selected from phosphonooxy, phosphonooxymethyl and 2-phosphonooxyethyl and where the ring is optionally further substituted on carbon or nitrogen by 1 or 2 methyl.

15 8. A compound according to any one of the preceding claims wherein  $\text{R}^3$  is methoxy or hydrogen; or a pharmaceutically acceptable salt thereof.

9. A compound according to any one of the preceding claims wherein  $\text{R}^4$  is phenyl or benzyl optionally substituted by 1 or 2 of fluoro or chloro; or a pharmaceutically acceptable  
20 salt thereof.

10. A compound selected from:

3-[(3-{{4-((6-[(3-chlorobenzyl)oxy]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl}oxy}propyl)amino]-3-methylbutyl dihydrogen phosphate;

25 3-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl}oxy}propyl)amino]-3-methylbutyl dihydrogen phosphate;

2-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl}oxy}propyl)(ethyl)amino]ethyl dihydrogen phosphate;

2-[1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl}oxy}propyl)piperidin-2-yl]ethyl dihydrogen phosphate;

[(2R)-1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl}oxy}propyl)pyrrolidin-2-yl]methyl dihydrogen phosphate;

2-[1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)piperidin-4-yl]ethyl dihydrogen phosphate;

2-[ethyl(3-{{4-((6-[(3-fluorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)amino]ethyl dihydrogen phosphate;

5 2-[(3-{{4-((6-[(3,4-difluorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(isopropyl)amino]ethyl dihydrogen phosphate;

(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)piperidin-4-yl dihydrogen phosphate;

4-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}butyl dihydrogen phosphate;

10 2-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(methyl)amino]ethyl dihydrogen phosphate;

[1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)piperidin-2-yl]methyl dihydrogen phosphate;

15 2-[(5-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}pentyl)(ethyl)amino]ethyl dihydrogen phosphate;

4-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(ethyl)amino]butyl dihydrogen phosphate;

2-[(3-{{4-((6-[(3-fluorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(methyl)amino]ethyl dihydrogen phosphate;

20 2-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(isobutyl)amino]ethyl dihydrogen phosphate;

2-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(cyclopropyl)amino]ethyl dihydrogen phosphate;

25 1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)piperidin-4-yl]methyl dihydrogen phosphate;

2-[4-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)piperazin-1-yl]ethyl dihydrogen phosphate;

[(2S)-1-(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)pyrrolidin-2-yl]methyl dihydrogen phosphate;

30 2-[(3-{{4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy}propyl)(cyclobutyl)amino]ethyl dihydrogen phosphate;

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2-[(3-[(4-((6-[(3-chlorobenzoyl)amino]pyridin-3-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl)(prop-2-yn-1-yl)amino]ethyl dihydrogen phosphate;

2-[(3-[(4-((2-[(3-chloro-4-fluorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl)(cyclohexyl)amino]ethyl dihydrogen phosphate;

5 2-[(3-[(4-((2-[(3-chloro-4-fluorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl)(ethyl)amino]ethyl dihydrogen phosphate;

3-[(4-((2-[(3-chlorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl dihydrogen phosphate;

1-[(3-[(4-((2-[(3-chloro-4-fluorophenyl)amino]methyl)pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl]piperidin-4-yl dihydrogen phosphate;

10 3-[(3-[(4-((2-[(3-chloro-4-fluorobenzyl)oxy]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl]amino]-3-methylbutyl dihydrogen phosphate;

2-[(3-[(4-((2-[(3-chlorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)propyl)(2,2-dimethylpropyl)amino]ethyl dihydrogen phosphate;

15 [2-((4-((2-[(3-chloro-4-fluorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)methyl)cyclopropyl]methyl dihydrogen phosphate; and

2-[(4-((4-((2-[(3-chloro-4-fluorobenzoyl)amino]pyrimidin-5-yl)amino)-6-methoxyquinazolin-7-yl]oxy)methyl)piperidin-1-yl]ethyl dihydrogen phosphate;

or a pharmaceutically acceptable salt thereof.

20

11. A pharmaceutical composition comprising a compound according to any one of the preceding claims or a pharmaceutically acceptable salt thereof in association with a pharmaceutically acceptable diluent or carrier.

25 12. Use of a compound according to any one of claims 1 to 10 in therapy.

13. Use of a compound according to any one of claims 1 to 10 in the preparation of a medicament for the treatment of a disease where the inhibition of one or more Aurora kinase is beneficial.

30

14. Use according to claim 13 wherein Aurora kinase is Aurora-A kinase or Aurora-B kinase.

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15. Use of a compound according to any one of claims 1 to 10 or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for the treatment of hyperproliferative diseases such as cancer and in particular colorectal, breast, lung, prostate, pancreatic or bladder and renal cancer or leukemias or lymphomas.

5

16. A method of treating a human suffering from a disease in which the inhibition of one or more Aurora kinases is beneficial to the treatment, comprising the steps of administering to a person in need thereof a therapeutically effective amount of a compound as defined in claim 1 or a pharmaceutically acceptable salt thereof.

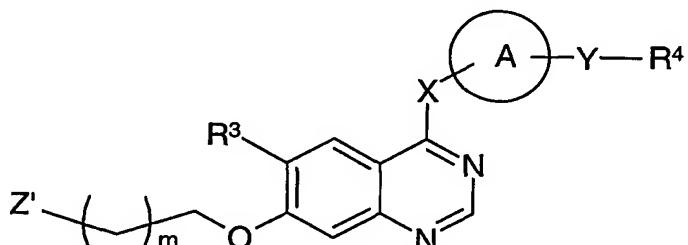
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17. A method of treating a human suffering from colorectal, breast, lung, prostate, pancreatic or bladder and renal cancer or leukemias or lymphomas, comprising the steps of administering to a person in need thereof a therapeutically effective amount of a compound as defined in claim 1 or a pharmaceutically acceptable salt thereof.

15

18. A process for the preparation of a compound of formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof, which process comprises converting a compound of formula (II) into a compound of formula (I) by phosphorylation of an appropriate hydroxy group:

20



formula (II)

where A, X, m, Y, R<sup>3</sup> and R<sup>4</sup> are as defined for formula (I); and Z' is a group selected from –NR<sup>1</sup>R<sup>2</sup>, hydroxy, C<sub>3-6</sub>cycloalkyl which C<sub>3-6</sub>cycloalkyl is substituted by hydroxy or C<sub>1-4</sub>alkyl substituted by hydroxy, and a 4- to 7-membered ring linked via a carbon atom, containing a

25 nitrogen atom and optionally containing a further nitrogen atom, which ring may be saturated, unsaturated or partially saturated and which ring is substituted on carbon or nitrogen by hydroxy or C<sub>1-4</sub>alkyl substituted by hydroxy and which ring is optionally further substituted on carbon or nitrogen by 1, 2 or 3 halo or C<sub>1-4</sub>alkyl groups; R<sup>1</sup> is a group selected from –

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COR<sup>8'</sup>, -CONR<sup>8' R<sup>9</sup></sup> and C<sub>1-6</sub>alkyl which C<sub>1-6</sub>alkyl is substituted by hydroxy and optionally further substituted by 1 or 2 halo or methoxy groups; R<sup>2'</sup> is a group selected from hydrogen, -COR<sup>10</sup>, -CONR<sup>10</sup>R<sup>11</sup> and C<sub>1-6</sub>alkyl which C<sub>1-6</sub>alkyl is optionally substituted by 1, 2 or 3 halo or C<sub>1-4</sub>alkoxy groups, -S(O)<sub>p</sub>R<sup>11</sup> (where p is 0, 1 or 2) or hydroxy, or R<sup>2'</sup> is a group selected from C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>3-6</sub>cycloalkyl and C<sub>3-6</sub>cycloalkylC<sub>1-4</sub>alkyl; or R<sup>1'</sup> and R<sup>2'</sup> together with the nitrogen to which they are attached form a 4- to 7- membered ring optionally containing a further nitrogen atom which ring may be saturated, unsaturated or partially saturated and which ring is substituted on carbon or nitrogen by a group selected from hydroxy and C<sub>1-4</sub>alkyl which C<sub>1-4</sub>alkyl is substituted by hydroxy or -NR<sup>8' R<sup>9</sup></sup> and which ring is optionally further substituted on carbon or nitrogen by 1, 2 or 3 halo or C<sub>1-4</sub>alkyl groups; and where R<sup>8'</sup> is C<sub>1-4</sub>alkyl substituted by hydroxy and optionally further substituted by 1 or 2 halo or methoxy groups:

and thereafter if necessary:

- i) converting a compound of the formula (I) into another compound of the formula (I); and/or
- ii) removing any protecting groups; and/or
- iii) forming a pharmaceutically acceptable salt thereof.